The Harris M. Schurmeier Collection, 1970-1986
3.0 cubic feet
JPL 173

Biography

Harris M. ("Bud") Schurmeier was born July 4, 1924 in St. Paul, Minnesota. He received a Bachelor of Science degree in mechanical engineering from the California Institute of Technology (Caltech) in 1945. He then went into the Navy and was commissioned as a naval aviator in 1947. He returned to Caltech and earned a Master of Science in aeronautical engineering in 1948 and a professional degree in aeronautical engineering in 1949. Schurmeier joined the Jet Propulsion Laboratory (JPL) in September 1949 as a research engineer working on the assembly and calibration of JPL's 20-inch supersonic wind tunnel.

Schurmeier's career at JPL:
Research Engineer, Wind Tunnel, 1949-53
Chief, Section 13, Wind Tunnel Section, 1953-56
Chief, Aerodynamics Division, 1956-59
Deputy Program Director, Sergeant Missile, 1959
Director, Systems Division, 1959-62
Project Manager, Ranger Project, 1962-65
Deputy Project Manager, Voyager - Mars Mission, 1965
Project Manager, Mariner Mars '69, 1965-69
Deputy Assistant Laboratory Director for Flight Projects, 1969-76
Project Manager, Mariner Jupiter/Saturn '77 (later named Voyager), 1972-76
Assistant Laboratory Director for Utilitarian Systems, 1976-1978
Assistant Laboratory Director for Energy and Technology Applications, 1978-81
Associate Director for Defense and Civil Programs, 1981-85

Schurmeier retired from JPL in November 1985. He was awarded with several NASA medals, including the NASA Exceptional Scientific Achievement Award, and was a two-time winner of the Astronautics Engineer Award from the National Space Club. Schurmeier also served as a member of the Apollo 13 Failure Investigation Team, and the Hubble Space Telescope Repair Mission Review Board. He chaired the Galileo Project Review Board and the W. M. Keck Observatory Project Review Board.

Provenance

The collection was transferred from the office of Judy Levstik, Section 100, Office of the Director, to the JPL Archives on July 1, 1992. It became Accession 1992-60.

Collection Arrangement and Description

The items in the collection were collected by Schurmeier and at some point were transferred from his possession to the Office of the Director. Also in the collection are a few items that were originally collected by Assistant Laboratory Director Robert J. Parks and Deputy Director Charles H. Terhune. Parks worked closely with Schurmeier on several projects, and a substantial portion of items that document the Arroyo Center were from Terhune. The overall small amount of Parks and Terhune materials greatly complement the materials collected by Schurmeier.

Represented in the collection are correspondence, reports, newspaper clippings, magazine articles, meeting agendas and minutes, and Viewgraphs. They formed a disparate set of materials that did not reflect an overall organization prior to processing. Therefore, the collection was divided during processing by subject into nine series: Strategic Defense Initiative, Arroyo Center, Caltech/JPL Relations, NASA/JPL Relations, Executive Council Retreats, Workforce Planning, Energy Materials, International Relations and Miscellaneous. Each series is filed chronologically unless otherwise noted. One document, a study of Caltech-JPL relations, dates from 1970; however, the bulk of the collection is from 1976-1985.

The Strategic Defense Initiative, Arroyo Center, and Caltech/JPL Relations series are closely linked in their information content. The Caltech-JPL relationship was strained during the 1980s when JPL looked for increased work in federal classified projects for the Department of Defense, such as various aspects of the Strategic Defense Initiative and military research to be done at the Arroyo Center.

Strategic Defense Initiative (Boxes 1-2; folders 1-22).

The Strategic Defense Initiative (SDI) was formulated in a speech on March 23, 1983 by President Ronald Reagan as a potential new approach to national security. SDI was a space-based defense system designed to protect the United States from an all-out nuclear attack by the Soviet Union. It was to include satellites that could detect a massive nuclear launch within seconds, orbiting laser weapons to destroy the first wave of missiles, laser-equipped submarines that could defend against the next round of attacks, and a ground-based missile system providing the last line of defense. Opponents initially referred to SDI as "Star Wars," a name that was picked up and used by SDI supporters as a way of promoting the program.

SDI was ultimately defeated in the Congress by members who claimed that it voided the terms of the 1972 anti-ballistic missile treaty between the United States and the Soviet Union. The end of the Cold War also caused the sweeping goals of SDI to be scaled back further. The SDI program was abandoned in 1993 in favor of the Ballistic Missile Defense Organization, a lesser version of SDI.

Support of SDI polarized the scientific community. Represented in the collection are numerous articles and newspaper clippings examining both sides of SDI along with reports and policy papers.

The second half of the series consists of documents dealing with the Pilot Architecture Study (PAS) Executive Review Panel. The objectives of the Pilot Architecture Study were to develop an assessment for ballistic missile defense and to provide a methodology for evaluating the results of the SDI System Architecture and Key Trade-Off Studies.

The Executive Review Panel of the Pilot Architecture Study was composed of members representing the Army and the various Federally Funded Research and Development Centers, such as Los Alamos National Laboratory, Lawrence Livermore National Laboratory, Lincoln Laboratory and JPL. Chairman was Richard A. Montgomery of the Arroyo Center, a research center at the time operated by JPL. Schurmeier was the JPL representative on the Panel. The last meeting of the Executive Review Panel was held on May 21-22, 1985, where a final summary report was issued. It is included in the series along with other correspondence and memoranda pertaining to this and other meetings.

Also included are three folders on the All Sources Analysis System/Enemy Situation Correlation Element (ASAS/ENSCE) program at JPL. ASAS/ENSCE was an intelligence processing system to aid the military in making tactical command and control military decisions. Schurmeier was a member of the ASAS/ENSCE Project Price Board and Chairman of the Review Board.

Arroyo Center (Box 2; folders 23-33).

The Arroyo Center was to have been an external, independent organization that would furnish the U.S. Army with information and findings derived from analyses of Army policy issues. The focus was to be on far-term, deep-reaching, policy-oriented issues. It was intended to be similar to the relationship between the RAND Corporation and the U.S. Air Force. In May 1982 the U.S. Army initially approached JPL with the concept of an analysis center. JPL established a study group to consider the Army request in May 1982. In May 1983, the Army Analysis Program was named the Arroyo Center.

In October 1982, a committee was formed to explore the problems and opportunities the Army Analysis Program would pose for JPL. This committee was comprised of people with backgrounds in the defense community and the Caltech faculty. It was chaired by former Lab Director William H. Pickering, called back into service for JPL. The "Pickering Committee" is represented in the series with the Chairman's Final Report, dated January 15, 1983. This report represented the opinions of Pickering only, and had not been discussed with the other committee members. Three of the committee members voiced their displeasure with the report in correspondence to Pickering and disassociated themselves from it. The correspondence is represented in the series.

Also represented in the series are extensive notes and correspondence pertaining to the hiring of a director for the Arroyo Center. The Search Committee was chaired by JPL Deputy Director Charles H. Terhune, and included Schurmeier as a member. Included in the collection are handwritten notes, lists of

potential candidates and correspondence. In September 1983, after a lengthy interview process, Richard A. Montgomery, Vice President of R&D Associates, was named as Director of the Arroyo Center. He was to be the equivalent of a JPL Assistant Laboratory Director.

In December 1983, Caltech President Marvin L. Goldberger reported to the Caltech faculty that he had failed to adequately keep the faculty informed about the development of the Arroyo Center. The faculty was concerned mainly with three issues: the extent of the Arroyo Center's classified work; Caltech's reputation if connected to military work at a center located off lab; and the lack of Center oversight by the Caltech and JPL administrations and the Caltech faculty.

In January 1984, the Caltech faculty voted for Caltech to divest itself of the Arroyo Center, arguing that the work of the Center was not making the best use of Caltech and of JPL. The Arroyo Center was ultimately transferred to the RAND Corporation where it continues today as a Federally Funded Research and Development Center.

There are numerous newspaper clippings documenting the media coverage of the controversy surrounding the Center, and there are memoranda and correspondence pertaining to the divestment of the Arroyo Center by JPL and its ultimate transfer to RAND Corporation.

Caltech/JPL Relations (Box 3; folders 34-46).

This series is linked with the previous series regarding the eventual divestment of the Arroyo Center by the Caltech faculty. The prospect of increased classified Defense work was one point of concern and contention between JPL and Caltech.

The first report examining the relationship between Caltech and JPL occurred in 1969-70, under the JPL Study Committee, chaired by Dr. N. H. Brooks, Professor of Civil Engineering. The committee was comprised of twelve members, three of which were JPL managers. The Committee was appointed by Caltech President Harold Brown after the Caltech Aims and Goals Committee raised the question as to whether Caltech should continue to manage JPL. The published report of the JPL Study, dated March 11, 1970, is included in the collection.

In July 1975, Caltech President Harold Brown and JPL Director William H. Pickering appointed a joint Lab-Campus committee, headed by Professor of Physics, later Provost, Rochus E. ("Robbie") Vogt and JPL'er Jack N. James. The committee investigated the interaction between JPL and Caltech in an effort to stimulate more constructive interaction between the two. The committee was composed of twelve people, six of whom were JPL personnel. The report, "A Study of Relations Between the Jet Propulsion Laboratory and the Campus of the California Institute of Technology," also known as the "Vogt Report" or the "Orange Report" due to the orange color of the cover, is represented in the collection.

The findings of the Vogt Report proved to be controversial, and provoked a response, "Where to Bite the Orange?" by R. W. Davies. The first part of this response in represented in the collection. Also included is a folder with correspondence and responses to the Vogt Report by Caltech President Harold Brown and JPL Director Bruce Murray.

An attempt was made to strengthen the relationship between Caltech and JPL in 1982 by naming incoming JPL Director Lew Allen as a Caltech Vice President. According to the minutes of a Caltech Faculty Board meeting of October 11, 1982, this action was done primarily to communicate to the world that JPL and Caltech have a very close relationship. The policy of the JPL Director also being a Caltech Vice President has continued under Allen's successor, Ed Stone.

The issue that proved to be the most contentious between Caltech and JPL was classified work done by JPL for the Department of Defense (DoD), such as the Arroyo Center and projects such as U.S. Air Force's Talon Gold. There are three folders documenting Caltech memoranda regarding DoD work by JPL. Due to budget cuts and other political pressures JPL found that funding for Solar System exploration was dwindling; some such as Hans Mark thought that the very survival of the Lab necessitated JPL doing work for DoD and the Department of Energy.

There were discussions on whether JPL should form a separate organization to deal with Defense projects, or whether Caltech should sever ties with JPL totally over the issue. The Caltech Committee on Oversight of Classified Research chaired by Dr. Robert Christy, then beginning in October 1984 by Dr. John Seinfeld, was the Caltech oversight authority regarding classified defense work. Also in October 1984 the

Caltech Administrative Committee on JPL was formed, to be concerned broadly with JPL/Campus relations and relevant policies affecting the two institutions. Chairman of the Committee was Dr. Fred Culick. The charter of the committee as well as related correspondence is represented in the series.

By the early 1980s JPL was already involved in Defense projects such as the Autonomous Spacecraft Project (ASP) for the U.S. Air Force and the Mobile Automated Field Instrumentation System (MAFIS) for the U.S. Army. The goal of ASP was to design Air Force satellites that would be more survivable and rely less on ground control. MAFIS was an instrumentation system that would be a cost effective and accurate means of training and of evaluating Army tactics and weapons in a realistic simulated environment. Unlike ASP, MAFIS was a totally unclassified project.

Another military project, Talon Gold, was quite controversial and classified. Talon Gold was a program of the Defense Advanced Research Projects Agency (DARPA). Talon Gold was one component of a space-based chemical laser, involving precision tracking and pointing systems at a distant target moving at high speeds. Lockheed Martin was the major contractor, with JPL providing project support. Concerns of the Caltech faculty, as voiced in correspondence and during meetings of the Faculty Board, and newspaper clippings related to Talon Gold are represented in the series.

NASA/JPL Relations (Boxes 3-4, folders 47-53).

In June 1974, NASA Administrator James C. Fletcher initiated a NASA planning study entitled "Outlook for Space." The study examined the civilian role of the U.S. space program for the next twenty-five years. There were twenty on the study team, all except one from NASA, and none from JPL, but the Working Group on Technology Forecast was chaired by Jack James and included numerous JPL employees as advisors and contributors. Represented in the series are correspondence regarding the Outlook for Space study, and two volumes, the *Report to the NASA Administrator by the Outlook for Space Study Group,* and the final published report from the JPL Outlook for Space Task Group, *A Forecast of Space Technology, 1980-2000,* published in January 1976.

In January 1981 a steering group to overview improvements in NASA project management was created under the chairmanship of Anthony J. Calio, NASA Associate Administrator for Space and Terrestrial Applications. The steering group was formed in the aftermath of a report by a committee chaired by Don Hearth of Langley Research Center on NASA project management. Bud Schurmeier was a member of the steering group. Represented in the collection are the presentation materials of the final oral report from the Hearth Committee, and correspondence and memoranda documenting the actions of the Calio Project Management Committee.

A separate folder has been devoted to correspondence regarding Hans Mark. Mark, a key player in NASA and space policy during the 1970s and 1980s, was Director, NASA-Ames Research Center, 1969-77; Deputy Secretary of the Air Force, 1977-79; Secretary of the Air Force, 1979-81; NASA Deputy Administrator, 1981-84. Represented in the series is a memorandum from JPL'er Clarence R. Gates describing a review given by Mark in January 1982 to three JPL divisions and Lab Director Bruce Murray. According to the memo, which is confirmed in Murray's book *Journey Into Space*, Mark was quite critical of JPL, stating that the planetary program was an aberration that would not recur, and that NASA could not support JPL at its then-current level. Mark estimated that JPL had a year to make a transition from planetary exploration to defense work. The other item in the folder is an address Mark delivered in 1983 to the American Institute of Aeronautics and Astronautics.

Executive Council Retreats (Boxes 4-5, folders 54-62).

The Executive Council was formed in 1963 by Lab Director William Pickering to act as an advisory board to the Director. Beginning in the late 1960s, but not occurring regularly until 1976, the Executive Council held retreats that were high-level policy meetings usually held away from the campus and lab.

Included in the series is a folder about a special Executive Council meeting held on May 15, 1984 on work force planning. A folder documenting briefings to the Senior Staff is also included. The series includes correspondence, notes, presentation materials and Viewgraphs. As a member of the Executive Council and Senior Staff, Schurmeier was present at the meetings.

Workforce Planning (Box 5; folders 63-72).

Workforce planning was an important issue in Executive Council meetings and retreats. This series is composed of workforce planning memoranda and estimates for a number of JPL programs. The materials probably originated in Executive Council meetings, although there is no overt indication of this.

Included in the series is a file titled "JPL 2000." In May 1984, JPL Chief Scientist Arden L. Albee sent a letter to several people asking them to give their personal judgment as to what JPL would be like in the year 2000. Represented in the file is the initial form and raw figures represented in graph form. Two interoffice memoranda from Marshall Alper to Albee are also in the series.

Energy Materials (Boxes 5-6; folders 73-85).

The series primarily includes published materials dealing with energy, and reports. In December 1981, Schurmeier testified before the House Subcommittee on Energy Conservation and Power, and his testimony is included in the series.

International Relations (Box 6; folders 86-89).

Represented in the three folders on Mexico are various multinational conferences on solar energy, such at the U.S.-Mexico Solar Energy Conference, held at Mexico City in December 1978. Included in the series are correspondence, meeting agendas, business cards, handwritten notes, and several photographs of displays at the conference.

Also represented in the series are correspondence to and from the Energy Subcommittee of the Commission of the Californias. The Commission of the Californias was an organization aiding in developing and promoting cultural and trade relations between the state of California and Mexico's Border States. Presentation material from an August 1979 meeting held at Lake Tahoe is included in the collection.

Also in the series is a folder documenting the International Solar Energy Congress held at New Delhi, India, in January 1978. Represented in the series are an information guide, program, miscellaneous ephemera, and several snapshots of Indian scientists at the congress.

Miscellaneous (Boxes 7-9; folders 90-121).

This series is comprised of materials not easily fitting into the other series. It is organized chronologically.

Included are three folders on the JPL Equipment and Instrumentation Committee, formed in 1980, to implement actions to assure the availability of laboratory equipment and instrumentation necessary to meet the evolving needs of the Laboratory. Included in the files are operating procedures, meeting minutes, and allocation proposals.

Also included are two JPL Five-Year Plans. The Five-Year Plans were reworked and reissued each year, and intended to give perspective and guidance to the Laboratory's managers. The Plan described directions, strategies, and key elements of programs. The two Five-Year Plans in the series, dated August 26, 1983 and October 29, 1984 are both divided into NASA Program Plans, Defense and Civil Programs Plans, and Institutional Plans, along with summaries of program cost and workforce forecasts.

JPL Discreet Materials

14 folders are stamped or marked "JPL Discreet." Whole folders that are Discreet are noted in the folder list. The original positions of JPL Discreet and Executive Council Discreet material in the collection have been marked with separation sheets. The material has been moved to a box at the end of the collection.

Conservation/Preservation

Standard preparations of documents for long term storage were completed.

Separation Statement

An original accession (1992-60) was split up into two separate collections: the Harris M. Schurmeier Collection (this collection), and the Robert J. Parks Collection (JPL 174). The criteria for the separation were that most of the items were either marked internally Schurmeier or Parks, the discontinuity of the date range of the two collections and the difference in subject matter.

Finding Aids

No other finding aids exist for the collection.

FILE FOLDER LIST

Box 1 of 10 – Defense – Strategic Defense Initiative

Fld. 1	United Nations Study on the Implications of Establishing an International Satellite Monitoring Agency, August 6, 1981.
Fld. 2	"The Strategic Defense Initiative," Statement by James C. Fletcher, Before the Subcommittee on Research and Development of the Committee on Armed Services, U.S. House of Representatives, March 1, 1984.
Fld. 3	"Space-Based Missile Defense, A Report by the Union of Concerned Scientists," March 1984.
Fld. 4	Ashton B. Carter, *Directed Energy Missile Defense in Space: Background Paper*, Office of Technology Assessment, April 1984.
Fld. 5	AIAA Washington Conference, memorandum from T. W. Hamilton to H. M. Schurmeier, May 8, 1984.
Fld. 6	Outer Space Arms Control Questions and Answers, memorandum, May 14, 1984.
Fld. 7	Issues in Science and Technology, three articles on SDI, Fall 1984.
Fld. 8	Gerald Yonas, "The Strategic Defense Initiative, Revision #6," October 19, 1984.
Fld. 9	Published articles regarding SDI, 1984-1985.
Fld. 10	"The President's Strategic Defense Initiative," January 1985.
Fld. 11	Weapons in Space Symposium, agenda and notes, January 12, 1985.
Fld. 12	Pilot Architecture Study, Study Plan, 1984.
Fld. 13	Pilot Architecture Study, Background Information, Correspondence, 1983-1985.
Fld. 14	Pilot Architecture Study, Executive Review Panel Meeting, December 18, 1984.
Fld. 15	Pilot Architecture Study, Executive Review Panel Meeting, January 8-11, 1985.
Fld. 16	Pilot Architecture Study, Executive Review Panel Meeting, January 16-17, 1985.
Fld. 17	Pilot Architecture Study, Executive Review Panel Meeting, February 11-12, 1985.
Fld. 18	Pilot Architecture Study, Executive Review Panel Meeting, March 4, 21, 1985.
Fld. 19	Pilot Architecture Study, Executive Review Panel Meeting, May 21-22, 1985.

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Fld. 20	ASAS Cost History, 1983.
Fld. 21	ASAS/ENSCE Meetings, 1984.
Fld. 22	ASAS/ENSCE Correspondence, 1985.
	Defense – Arroyo Center
Fld. 23	Arroyo Center, Memoranda, Correspondence, 1982-1985.
Fld. 24	Arroyo Center, Caltech Faculty Discussions, 1982-1985.
Fld. 25	Army Analysis Program, Pickering Committee, December 1982-February

1983.

Fld. 26 Search Committee for Arroyo Center Director, 1983.

Fld. 27 The Arroyo Center Proposed FY 1984 Program, for Presentation to the Arroyo Center Policy Committee, November 14, 1983.

Fld. 28 Arroyo Center, Advisory Council Background Material, from Binder of Charles H. Terhune, 1983-1984.

Fld. 29 Arroyo Center, Divestiture by Caltech, press clippings, January-February 1984.

Fld. 30 Memorandum on Proposed Plan for Arroyo Center, January 17, 1984.

Fld. 31 Background Material for Caltech Faculty Discussion, January 23, 1984.

Fld. 32 Divestiture by Caltech, January-November 1984.

Fld. 33 Arroyo Center, Summary Briefing, July 1984.

Box 3 of 10 – Caltech/JPL Relations

Fld. 34 "The Jet Propulsion Laboratory and the Caltech Campus," JPL Study Committee, March 11, 1970.

Fld. 35 "A Study of Relations Between the Jet Propulsion Laboratory and the Campus of the California Institute of Technology: Part I: Main Report" (Vogt Report), April 2, 1976.

Fld. 36 Vogt Report, Part II: Reference Volume, May 5, 1976.

Fld. 37 R. W. Davies, "Where to Bite the Orange?" Response to Vogt Report, April 26, 1976.

Fld. 38 Correspondence Regarding Vogt Report, April 1976-January 1977.

Fld. 39 Caltech Policy Memoranda on Department of Defense Work by JPL, 1980-1985. [folder 1 of 3]

Fld. 40 [folder 2 of 3]

Fld. 41 [folder 3 of 3]

Fld. 42 Trustee Committee Meeting, October 16, 1981.

Fld. 43 Caltech/JPL Relations, Talon Gold, 1984.

Fld. 44 Caltech Committee Against Space Weapons, 1984.

Fld. 45 Martin Goldsmith, "A Proposal for Separating the Jet Propulsion Laboratory from the Campus of the California Institute of Technology," November 13, 1984.

Fld. 46 Administrative Committee on JPL, 1984-1985.

NASA/JPL Relations

Fld. 47 Outlook for Space Study, Memoranda, synopsis, 1975-1976.

Fld. 48 Outlook for Space, *Report to the NASA Administrator by the Outlook for Space Study Group*, NASA SP-386, January 1976. [bound]

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Fld. 49 Outlook for Space, *A Forecast of Space Technology, 1980-2000*, NASA SP-387, January 1976. [bound]

Fld. 50 State of California and NASA Memorandum of Understanding, 1977.

Fld. 51 Bruce Murray correspondence to James M. Beggs, 1981.

Fld. 52 Hearth-Calio Project Management Committee, 1981-1985.

Fld. 53 Hans Mark, 1982-1983.

JPL Executive Council

Fld. 54 Executive Council Retreat, April 6, 1983.

Fld. 55 Executive Council Retreat, April 10, 1984. ["Executive Council Discreet"]

Fld. 56 Executive Council Retreat, correspondence, notes, April 10, 1984.

Fld. 57 Special Executive Council Meeting on Work Force Planning, May 15, 1984.
Fld. 58 Executive Council Retreat, March 4, 1985.
Fld. 59 Executive Council Retreat, March 22-24, 1985. ["Executive Council Discreet"]
Fld. 60 Executive Council Retreat, Correspondence, March 22-24, 1985.
Fld. 61 Executive Council Retreat, Viewgraphs, March 22-24, 1985.

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Fld. 62 Senior Staff, Briefings, 1981-1982.

Workforce Planning

Fld. 63 Workforce Planning, Memoranda, March 1983-August 1985.
Fld. 64 Technical Divisions Manpower and Program Inputs, FY 1984, June-July 1983.
Fld. 65 Workforce and Program Plans for FY 84, June-July 1983.
Fld. 66 Workforce Planning, Defense Programs, Estimates, July 1983.
Fld. 67 Workforce Planning, Flight Projects, Flight Operations Manpower, April-October 1984.
Fld. 68 Workforce Planning, Civil Programs, 1984.
Fld. 69 Workforce Planning, Technology and Space Program Development, 1984.
Fld. 70 Workforce Planning, Telecommunications and Data Acquisition, 1984. ["Executive Council Discreet"]
Fld. 71 Workforce Planning, "JPL 2000," May 1984.
Fld. 72 Workforce Planning, Issues, August-November 1984.

Energy Materials

Fld. 73 *Should We Have a New Engine? An Automobile Power Systems Evaluation, Volume I. Summary*, JPL SP 43-17, October 1975.
Fld. 74 "The International Energy Situation: Outlook to 1985," Central Intelligence Agency, April 1977.
Fld. 75 Bruce C. Murray, "Solar Energy: Creating the Decentralized Option, A Personal Perspective" July 26, 1977.
Fld. 76 Energy, Magzaine/Newspaper articles, 1978-1985.
Fld. 77 Jeffrey L. Smith, *Photovoltaics as a Terrestrial Energy Source*, 3 volumes, Department of Energy Report, October 1980.
Fld. 78 Bob Easter, "Planning and Managing Federal Renewable Research and Development Programs," March 20, 1981.
Fld. 79 H. M. Schurmeier, "A Management Model for an Effective Government Role in Advanced Energy Technology," draft, April 1981.

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Fld. 80 The National Energy Policy Plan, July 1981.
Fld. 81 Schurmeier Testimony, House Subcommittee on Energy Conservation and Power, December 2, 1981.
Fld. 82 Richard O'Toole, "Recent Changes in the Energy Outlook, 1982-2000," November 10, 1982.
Fld. 83 California Methanol Assessment Volume 1: Summary Report, JPL Pub. 83-18, March 1983.
Fld. 84 Elmer Christensen, *Flat-Plate Solar Array Project: 10 Years of Progress*, October 1985.

Fld. 85 Energy Pamphlets, n.d.

International Relations

Fld. 86 International, Mexico, 1978-1982. [folder 1 of 3]
Fld. 87 [folder 2 of 3]
Fld. 88 [folder 3 of 3]
Fld. 89 International, India, 1978

Box 7 of 10 – Miscellaneous

Fld. 90 *Report of the Seasat Failure Review Board*, December 21, 1978.
Fld. 91 Gregory Maust, "Advanced Program Control Techniques," Management Systems Group, c. 1980.
Fld. 92 JPL Advisory Council, February-June 1980.
Fld. 93 Equipment and Instrumentation Committee Data Book, 1980-1985. [folder 1 of 3]
Fld. 94 [folder 2 of 3]
Fld. 95 [folder 3 of 3]
Fld. 96 Private Sector Sponsorship, 1981-1983.
Fld. 97 National Laboratory Studies, 1981-1984. [folder 1 of 2]
Fld. 98 [folder 2 of 2]
Fld. 99 Objectives of the Jet Propulsion Laboratory, 1982-1985.
Fld. 100 Jack N. James, Guide to Negotiating Memoranda of Understandings, February 4, 1982.

Box 8 of 10

Fld. 101 J. N. Wilson, J. N. James, "Defense Programs Standards for the Project Definition Phase," February 9, 1982.
Fld. 102 *Technical Division Task Management Requirements and Information*, 500-200, June 1982.
Fld. 103 Contracts Management Office, "Appendix A: Technical and Management Sections Preparation Guidelines," 500-129, Revision B, JPL D-163, November 1, 1982.
Fld. 104 Contracts Management Office, "Appendix B: Business/Cost Section Preparation Requirements," 500-129, Rev. B, JPL D-163, November 1, 1982.
Fld. 105 JPL Five-Year Plan, 500-21, Issue 9, JPL D-958, August 26, 1983.
Fld. 106 Office of Engineering and Review, "Guidelines for the Planning and Conduct of Formal and Informal Reviews," JPL D-363, Rev. A, March 1, 1984.
Fld. 107 "Project/Task Planning and Methods," JPL D-269, May 1984.
Fld. 108 "Voyager at Neptune and Triton: 1989," 400-230, May 1984.
Fld. 109 "NASA Earth System Sciences Committee (ESSC): A Working Framework," September 1984.
Fld. 110 Executive Office of the President, Office of Science and Technology Policy, "Funding Trends in NASA's Space Science Program," September 1984.
Fld. 111 JPL Five-Year Plan, 500-21, Issue 10, JPL D-958, October 29, 1984.
Fld. 112 Technology and Space Program Development, "Initiatives for Future Flight Experiments and Flight Projects by NASA Program Office/Division," 705-03, Rev. C, JPL D-218, Rev. B, January 25, 1985.
Fld. 113 Defense and Civil Systems Rationale and Guidelines, February 1985.
Fld. 114 Defense and Civil Programs, Guidelines, February-October 1985.
Fld. 115 John D. Young and others, "Some Considerations of Industry Use of NASA's Suborbital Microgravity Test Facilities to Accelerate the Commercialization of Materials Processing in Space," RANN, Inc., April 7, 1985.

Box 9 of 10

Fld. 116	"System Engineering at JPL," JPL D-2297, Rev. A, July 1985. [folder 1 of 2]
Fld. 117	[folder 2 of 2]
Fld. 118	Lew Allen Testimony, U.S. House Committee on Science and Technology, Science Policy Task Force, October 24, 1985.
Fld. 119	Galileo, Kennedy Space Center Recovery Schedule, December 5, 1985.
Fld. 120	National Academy of Engineering, Ballot and Nomination Forms, Spring 1986.
Fld. 121	J. B. Ford and others, "Shuttle Imaging Radar Views the Earth from Challenger: The SIR-B Experiment," JPL Pub. 86-10, March 15, 1986.

Box 10 of 10 – JPL Discreet

JPL Discreet material, 14 folders.

CATALOG DESCRIPTION

Harris M. Schurmeier Collection, 1970-1986 (bulk 1976-1985).

3.0 cu. ft. (10 boxes; 135 folders)

The items in the collection were gathered by Harris M. "Bud" Schurmeier. Schurmeier's career at the Jet Propulsion Laboratory (JPL) lasted from 1949 to 1985. During the years that the bulk of the collection encompasses, Schurmeier served as Assistant Laboratory Director for Utilitarian Systems (1976-78), Assistant Laboratory Director for Energy and Technology Applications (1978-81), and Associate Director for Defense and Civil Programs (1981-85).

Represented in the collection are correspondence, reports, newspaper clippings, magazine articles, meeting agendas and minutes, handwritten notes and Viewgraphs. The collection is divided into nine series: Strategic Defense Initiative, Arroyo Center, Caltech/JPL Relations, NASA/JPL Relations, Executive Council Retreats, Workforce Planning, Energy, International Relations and Miscellaneous. The Strategic Defense Initiative, Arroyo Center, and Caltech/JPL Relations series are closely linked, with the Caltech-JPL relationship being strained during the 1980s with JPL looking for increased work in classified projects for the Department of Defense, such as various aspects of the Strategic Defense Initiative and the Arroyo Center. The bulk of the series is between 1976-1985. Each series is filed chronologically unless otherwise noted.

The collection contains JPL Discreet materials.

Finding aid available in the repository.

Tracings

Jet Propulsion Laboratory – History
Jet Propulsion Laboratory – Executive Council
Jet Propulsion Laboratory – Defense and Civil Programs Office
California Institute of Technology
National Aeronautics and Space Administration
United States – Department of Defense
United States – Department of Energy
United States Army - Contracts
Strategic Defense Initiative
Strategic Defense Initiative – Pilot Architecture Study
Arroyo Center
Army Analysis Program
Talon Gold

Autonomous Satellite Project
Mobile Automated Field Instrumentation System
All Sources Analysis System/Enemy Situation Correlation Element (ASAS/ENSCE)
Commission of the Californias
Solar Energy
Vogt Report
Outlook for Space Study
Workforce Planning
Jet Propulsion Laboratory – Equipment and Instrumentation Committee
Union of Concerned Scientists
Schurmeier, Harris M., 1924-
Murray, Bruce C., 1931-
Allen, Lew, 1924-
Parks, Robert J., 1922-
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